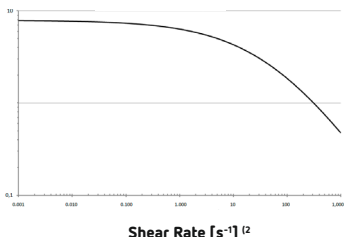
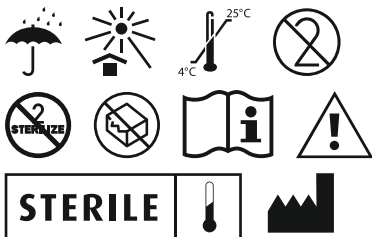


ophtha futur®
hpmc

Curve of Dynamic Viscosity [Pa·s] ⁽¹⁾



- (1) Curve of Dynamic Viscosity | Dynamische Viskosität | Courbe de Viscosité Dynamique | Curva de Viscosidad Dinámica | Curva di Viscosità Dinamica | Curve van de Dynamische Viscositeit | Křivka Dynamické Viskozity | Dinamikuss Viskozitás Görbe | Krzywa Lepkości Dynamicznej | Кривая Динамической Вязкости (паскаль-секунд)
- (2) Shear Rate | Scherrate | Taux de Cisaillement | Tarifa del Esquileo | Gradiente di Velocità | Afschuifsnelheid | Míra Smyku | Nyíróarány | Szybkość ścinania | Скорость Сдвига (секунд⁻¹)

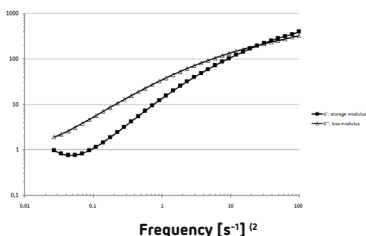


Information as of: | Stand der Information: | Informations en date de : | Información de: | Informazioni valide al: | Informatie per: | Informace ke dni: | A tájékoztató összeállításának időpontja: | Informacja począwszy od: | Информация по состоянию на:

07/2017

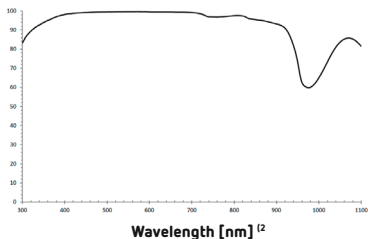
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Elasticity (Curves of Elasticity & Viscosity Modulus G' , G'') [Pa] ⁽¹⁾



- (1) Elasticity – Curves of Elasticity & Viscosity Modulus | Elastizität – Kurven Elastizitäts- & Viskositätsmodul | Élasticité – Courbes de Module élastique & Visqueux | Elasticidad – Curvas de Módulo Elástico y Viscoso | Elasticità – Curve Modulo Elastico e Viscoso | Elasticiteit – Curves Elastische en Visceuze Modulus | Pružnost – Křivky Elastické a Viskózní Modulem | Rugalmasság – Elasztikus és Viskózus Modulus Görbék | Elastyczność – Krzywe Elastyczna i Modułu Lepkości | Эластичность – Кривые упругой и модуль вязкости
- (2) Frequency | Frequenz | Fréquence | Frecuencia | Frequenza | Frequentie | Kmitočety | Frekvencia | Częstotliwość | Частота (секунд⁻¹)

Curve of Spectral Transmittance ⁽¹⁾



- (1) Curve of Spectral Transmittance | Spektrale Transmissionskurve | Courbe de Transmittance Spectrale | Curva de Transmisión Espectral | Curva di Trasmittanza Spetttrale | Curve van de Spectrale Doorlaatbaarheid | Křivka Spektrální Propustnosti | Spektrális Áteresztési Görbe | Krzywa Transmitancji Widmowej | Кривая Спектрального Коэффициента Пропускания Спектрального Коэффициента Пропускания
- (2) Wavelength | Wellenlänge | Longueur d'onde | Longitud de Onda | Lunghezza d'onda | Golflänge | Vlnová Délka | Hullámhossz | Długość Fali | Длина Волны (нм)

Composition and characteristics:

1 mL of **ophthafutur HPMC** solution comprises 20 mg HPMC (hydroxypropyl methylcellulose) as rheological active ingredient with a molecular weight of 80 kDa in balanced salt solution containing sodium chloride, potassium chloride, calcium chloride, magnesium chloride, sodium citrate, sodium acetate, HCl, NaOH, and water for injection. **ophthafutur HPMC** is sterile with an osmolality of 285 mOsm/kg, a pH value of 7.0, and a refractive index of 1.336. **ophthafutur HPMC** does not contain preservatives. In literature, hydroxypropyl methylcellulose (HPMC) is often designated as hypromellose or methylhydroxypropylcellulose.

Indications:

ophthafutur HPMC is used for → volume substitution → sustaining a deep anterior chamber → protection of intraocular tissues → lubrication of intraocular lenses and implantation instruments (injectors) → improvement of intraocular insight during surgery → mobilization of tissue e.g. in cases of cataract extraction or keratoplasty → prevention of adhesions and synechias in the course of surgical treatment of the eye → long-lasting moisturisation of the cornea → sustention of corneal transparency → protection and as a balance solution during gonioscopy and Phototherapeutic keratectomy (PTK) with Excimer laser

Application and dosage:

ophthafutur HPMC is injected in the anterior part of the eye or applied on the cornea, respectively. Prior to the implantation of intraocular lenses it is recommended to additionally cover the intraocular lens as well as all instruments with **ophthafutur HPMC** in order to protect the endothelium and surrounding tissues. Avoid overfilling of the eye chamber. At the end of surgical treatment or examination, **ophthafutur HPMC** must be removed by rinsing with a suitable solution (e.g. Ringers solution) and/or aspiration. Traces that remain after surgery will vanish almost completely ($\geq 98\%$) through Schlemm's canal within 24 hours.

For easy injection, it is recommended to use 23G blunt cannulas with a large inner diameter.

In case of intraocular injection, the suitable volume differs case by case and depends on the specific treatment. For topical use, the cornea should be covered evenly with **ophthafutur HPMC**, if not otherwise intended.

The disposal of **ophthafutur HPMC** has to be performed according to national regulations.

Contraindications:

ophthafutur HPMC should not be used in patients with hydroxypropyl methylcellulose hypersensitivity.

Adverse reactions:

In rare cases a slight and only temporary increase of the intraocular pressure was noticed after surgical treatment.

Interactions:

Interactions or incompatibilities are not known.

Warnings and precautions:

This product should only be used by professional users, who are familiar with the use of such a product. Precautions are the same as those associated with this type of surgical procedures. Injection of excessive amounts of **ophthafutur HPMC** may increase intraocular pressure (IOP) temporarily. An excessive IOP may also be caused by a pre-existing glaucoma condition, by reduced outflow, and by operative procedures and their aftereffects. Because these factors vary from case to case and are difficult to predict, the following precautions are recommended: → Do not overfill the eye with **ophthafutur HPMC**. → At the end of surgery, all remaining **ophthafutur HPMC** should be removed by irrigation and/or aspiration. → Carefully monitor the IOP, especially during the immediate post-operative period. In case that a significant increase of IOP is observed, treat appropriately. → Avoid the injection of an air bubble at the end of the surgery. → Content is only sterile if the sterile barrier is unopened and undamaged. → Do not use after expiration date. → Single use only. With topical use of **ophthafutur HPMC**, e.g. in the gonioscopy, the vision can temporarily slightly decrease due to the occurrence of streaks. Make sure that **ophthafutur HPMC** does not dry.

Storage:

ophthafutur HPMC should be stored at temperature 4 °C – 25 °C (above 40 °C risk of flocculation) and protected against freezing.

Shelf life:

2 years. **ophthafutur HPMC** must not be used after expiration date.

Content and sterilization:

ophthafutur HPMC is supplied STERILE in a disposable prefilled syringe with 2 ml HPMC-solution for ophthalmic application. **ophthafutur HPMC** is terminally sterilized by moist heat.

**Manufacturer:**

Pharmapur GmbH
Messerschmittring 33
86343 Königsbrunn
Germany
Phone: +49 8231 9577-0
Fax: +49 8231 9577-22
Mail: info@pharmapur.de
www.pharmapur.de

CE
0297

Pharmpur GmbH

Messerschmittring 33
86343 Königsbrunn
Germany

Phone: +49 8231 9577-0
Fax: +49 8231 9577-22

Mail: info@pharmpur.de
www.pharmpur.de

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